IBM PC Network–
Broadband

IBM PC Network Broadband

IBM PC Network Translator Unit

Networked PCs

Message Server

Print Server

File Server
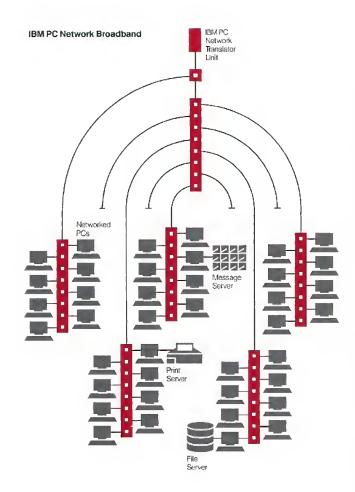
IBM

The smart way to connect a workgroup or department

The broadband IBM PC Network is a local area network that supports the IEEE 802.2 Logical Link Control (LLC) standard and uses Carrier Sense Multiple Access/Collision Detect (CSMA/CD) protocol. It is designed to directly connect IBM Personal System/2™ models and IBM Personal Computers. Via PC gateways, it connects IBM System/370 mainframes and other networks and public information services.

The broadband PC Network operates at two million bits per second and is capable of linking—over standard CATV cable—up to 72 computers within a radius of 1,000 feet. With a customized design using non-IBM equipment units, each broadband PC Network can support up to 1,000 PCs within a 16,000-foot radius.

The broadband PC Network is intended for workgroup and departmental environments where there is a need to exchange information and share resources among computers running such applications as word processing, spreadsheet analysis and data base management. It is particularly suited to coexisting with multiple service applications including: data transmission, video conferencing, voice and telephony, security monitoring and energy management.

Highlights
The features that make the broadband IBM PC Network so productive are:

IBM PC Network Adapter links IBM Personal Computer, Personal Computer XT™ and Personal Computer AT® systems by cable to IBM 5178 PC Network Translator Units.

IBM PC Network Adapter II links IBM Personal Computers and Personal System/2 Model 30s by cable to IBM 5178 PC Network Translator Units.

IBM PC Network Adapter II/A links IBM Personal System/2 Models 50, 60 and 80 by cable to IBM 5178 PC Network Translator Units.

IBM 5178 PC Network Translator Unit provides frequency translation from the send channel of the network to the receive channel. It allows attachment of up to 72 IBM Personal Computers to the network.

IBM PC Network Cabling components physically connect PC Network adapter cards to the IBM 5178 Translator Unit.

IBM LAN Support Program provides a common interface for both the IBM NETBIOS and IEEE 802.2 LLC application program interfaces. The LAN Support Program requires IBM Personal Computer Disk Operating System (PC DOS) 3.30 and supports all PCs[1] and Personal System/2 models. It is an alternative to the IBM PC Network Protocol Driver.

IBM PC Network Protocol Driver Version 1.00 provides NETBIOS interface compatibility that allows communications between PC Network Adapters, PC Network Adapter IIs, and PC Network Adapter II/As attached to the same IBM PC Network.

Advanced Program-to-Program Communications for the IBM Personal Computer (APPC/PC) allows application programs running on a PC attached to the network to access and exchange information with other PCs on the network running APPC/PC applications —or with an IBM host running a CICS program.

IBM LAN Manager Program provides problem determination, problem reporting, and critical device lost notification. As an application of IBM Net-View/PC, it can send alerts to a Communications Network Management (CNM) host.

IBM PC 3270 Emulation LAN Management Program is a cost-effective solution for small networks providing network management support from a CNM host.

IBM PC Local Area Network Program Version 1.20 provides the network commands and menus that users need to share files and printers with other workstations, exchange messages with other stations, and limit access to directories and programs to protect confidential data.

IBM LAN PrintManager Program allows PCs connected to the network to share an IBM 3820 Pageprinter attached to the network.

IBM PC 3270 Emulation Program Version 3.0 provides an IBM System/370 host gateway for the network. The PC 3270 Emulation Program Version 3.0 requires PC DOS 3.30 to support Personal System/2 models and the LAN Support Program.

IBM Token-Ring Network/ PC Network Interconnect Program provides IBM Token-Ring Network to IBM PC Network interconnection.

IBM Asynchronous Communications Server enables PCs on the network to access ASCII applications via switched communications lines. Access is provided to a ROLM CBX, other PBXs or the public switched telephone network.

IBM Remote NETBIOS Access Facility provides remote access capability for PCs to a PC Network via switched telecommunications lines.

Warranty

Every IBM product is built to meet high standards of quality and reliability. So you can count on the broadband IBM PC Network to perform smoothly year after year.

The terms of warranty for each network component are available from IBM and from IBM Authorized Remarketers.

[™] Personal System/2 and Personal Computer XT are trademarks of International Business Machines Corporation.
[®] IBM and Personal Computer AT are registered trademarks of International Business Machines Corporation.
[1] The IBM PC Convertible is not supported.

IBM PC Network broadband at a glance

Description	A low-cost, broadband local area network intended to link together IBM Personal Computer, Personal Computer XT, Personal Computer AT, and Personal System/2 models within a workgroup or department
Media	IBM PC Network Cabling Short-, Medium- and Long-Distance; standard CATV coaxial cable
Topology	Tree bus
Transport	Multichannel broadband
Protocol	CSMA/CD, IEEE 802.2 LLC
Workstations/ servers	72 IBM Personal Computers and Personal System/2 models within a 1,000-foot radius; 1,000 using non-IBM components within a 16,000-foot radius
Shared hardware	Fixed disks and printers attached to network file/print servers, IBM 3270 Emulation servers, asynchronous communications servers, local area network interconnect servers
Shared data	Data stored on network file servers, other LAN networks, IBM System/370 mainframes, and public information services
Communication capabilities	Messaging, data inquiry and response, file transfer, network server requests
Software	IBM Personal Computer Disk Operating System (PC DOS) 3.30, IBM PC Network Protocol Driver Version 1.00, IBM LAN Support Program, IBM Advanced Program-to-Program Communications for the IBM Personal Computer (APPC/PC), IBM PC Local Area Network Program Version 1.20, IBM LAN PrintManager Program, IBM PC 3270 Emulation Program Version 3.0, IBM Token-Ring Network/PC Network Interconnect Program, IBM Asynchronous Communications Server, IBM Remote NETBIOS Access Facility, IBM LAN Manager Program, IBM PC 3270 Emulation LAN Management Program Version 1.0
Network components	IBM PC Network Adapter, IBM PC Network Adapter II, IBM PC Network Adapter II/A, IBM 5178 PC Network Translator Unit, IBM PC Network Short-, Medium- and Long-Distance Cabling Kits
Network management	Error detection, local and centralized problem-determination aids

IBM 5178 PC Network Translator Unit

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